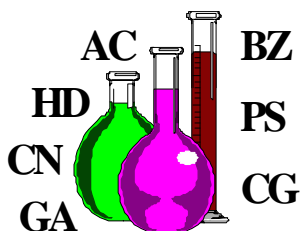


U.S. Army Center for Health Promotion and Preventive Medicine



General Facts About Blister Agent Lewisite (L)

218-38-1096

General

L is a vesicant (blister agent); also, it acts as a systemic poison, causing pulmonary edema, diarrhea, restlessness, weakness, subnormal temperature, and low blood pressure. In order of severity and appearance of symptoms, it is: a blister agent, a toxic lung irritant, absorbed in tissues, and a systemic poison. When inhaled in high concentrations, it may be fatal in as short a time as 10 minutes. L is not detoxified by the body. Common routes of entry into the body include ocular, percutaneous, and inhalation.

Synonyms

Arsine, (2-chlorovinyl) dichloro-;
Arsonous, dichloride, (2-chloroethenyl)-;
Chlorovinylarsine dichloride;
2-Chlorovinyl dichloroarsine;
beta-Chlorovinyl dichloroarsine;
Dichloro (2-chlorovinyl) arsine;
L;
EA1034.

Description

Pure Lewisite is a colorless, oily liquid with very little odor. The plant sample (war gas) has a geranium-like odor and is an amber to dark brown liquid.

Overexposure Effects

Lewisite presents both a vapor and liquid hazard and may damage the eyes, skin, respiratory tract, and circulatory system. Exposure to L causes immediate (within 30 seconds) irritation or pain. The vapor may be inhaled into the respiratory tract, causing the immediate onset of burning pain, irritation of the nose, and reflex coughing and chest tightness. The vapor also affects the eyes, with the immediate onset of pain, redness, uncontrollable blinking, and swelling of the eyelids. The vapor or a liquid splash of L on the skin may cause immediate stinging pain and destruction of tissue, following by blistering within 12 hours.

Emergency and First Aid Procedures

Inhalation: remove from the source immediately; give artificial respiration if breathing has stopped; administer oxygen if breathing is difficult; seek medical attention immediately.

Eye Contact: speed in decontaminating the eyes is absolutely essential; remove person from the liquid source; flush the eyes immediately with water for 10-15 minutes by tilting the head to the side, pulling eyelids apart with fingers, and pouring water slowly into the eyes; do not cover eyes with bandages, but if necessary, protect eyes by means of dark or opaque goggles; seek medical attention immediately.

Skin Contact: remove victim from source immediately and remove contaminated clothing; immediately decon affected areas by flushing with 10 percent sodium carbonate solution; wash off with soap and water after 3 to 4 minutes to protect against erythema; seek medical attention immediately.

Ingestion: do not induce vomiting; give victim milk to drink; seek medical attention immediately.

Storage of L

L is stored in ton containers (heavy steel cylinders) at one military installation on the continental United States - Tooele Army Depot, Utah.